PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BT1

DRILLING

Location	BROWNS TUNNEL
Project	BURNS PEAK
Prospect	BROWNS TUNNEL
Design By	PMQ
Logged By	PMQ
Relogged	
Commenced	14 March 1996
Completed	28 March 1996
Drilled By	East Coast Drilling
Drill Rig	LM38

OBJECTIVE

To test for continuation of mineralization up dip of that intersected in EAF6 &EAF9, and to correlate lithologies.

RESULT

Intersected minor Pb Zn mineralization in peperitic andesites up dip of EAF9, and identified overturned anticline.

COLLAR SURVEY (AMG)

AMG mN	5384644.4	Bearing	280.0
AMG mE	377719.8	Dip	-46.0
mN		Hole Length	167.0
mE		DH Survey Type	eastman single shot
RL	486.4		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-46.00	280.00
34.0	-46.00	279.00
64.0	-46.00	278.00
94.0	-45.75	278.00
124.0	-45.50	279.00
154.0	-45.00	279.50

SIGNIFICANT CORE LOSS

POOR GROUND CONDITION ZONES

HOLE SIZE

From	To	Size
0	29.5	HQ
29.5	167	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	CAPPED
Steel Casing	
PVC Casing	NIL
Ground Water	
Wedge	
Drill Pad	LEVELED AND SUMP FILLED IN

SIGNIFICANT INTERSECTIONS

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PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
1.20	25	0.04		CVC	bx
1.80	83	0.02		CVC	bx
2.40	100	0.01		CVC	bx
3.00	83	0.02		CVC	bx
4.10	82	0.05		CVC	qpm
5.60	47	0.09		CVC	bx
6.40	88	0.02		CVC	bx
8.20	44	0.01		CVC	bx
8.80	33	0.02		CVC	bx
9.00	100	0.04		CVC	bx
9.10	100			CVC	bx
10.30	25	0.05		CVC	bx
11.00	57			CVC	bx
11.70	14	0.05		CVC	bx
11.90	50	0.01		BTS	cht
12.40	100	0.07		BTS	cht
13.00	83	0.01		BTS	cht
13.60	117	0.03		BTS	cht
15.30	97	0.03		BTS	slt
15.90	100	0.01		BTS	cht
17.70	78	0.03		BTS	Ln
18.30	67	0.03		BTS	Ln
19.00	100	0.06		BTS	Ln
20.50	93	0.06		BTS	Ln
21.10	100	0.01		BTS	Ln
21.90	100	0.05		BTS	Ln
23.40	93	0.04		BTS	Ln
24.00	83	0.13		BTS	Ln
25.20	96	0.04		BTS	Ln
26.50	108	0.04		BTS	Ln
28.00	100	0.04		BTS	Ln
29.50	93	0.03		BTS	Ln
31.10	78	0.04		BTS	Ln
32.60	93	0.04		BTS	Ln
34.10	100	0.03		BTS	Ln
35.90	78	0.09		BTS	Ln
37.10	75	0.01		BTS	Ln
37.80	57	0.01		BTS	Ln
38.80	80	0.02		BTS	Ln
39.60	38	0.03		BTS	Ln
40.90	85	0.06		BTS	Ln
43.10	95	0.02		BTS	Ln
45.50	104	0.08		BTS	cht
47.50	110	0.03		BTS	Ln
49.10	100	0.15		BTS	Ln
50.90	94	0.11		BTS	Ln
51.60	100	0.05		BTS	Ln
52.50	106	0.04		BTS	Ln
54.80	70	0.02		BTS	Ln
56.40	112	0.03		BTS	Ln
58.10	103	0.03		BTS	bx
61.00	97	0.02		BTS	bx
63.10	100	0.03		BTS	Lr
64.10	100	0.02		BTS	Lr
66.10	90	0.05		BTS	Lr
69.20	100	0.02		BTS	Lr
72.30	100	0.11		BTS	Lr
73.60	100	0.02		BTS	Lr
75.10	100	0.07		BTS	Lr
76.70	100	0.05		BTS	Lr
77.90	100			BTS	Lr
80.80	100	0.05		BTS	Lr
82.10	96	0.02		BTS	Lr
85.10	97	0.03		BTS	Lr
86.30	75	0.06		BTS	Lr
88.10	94			BTS	Lr
89.30	104	0.13		BTS	Lr
90.50	92	0.01		BTS	Lr
91.50	100			BTS	Lr
93.30	100	0.10		BTS	Lr
94.80	100	0.04		BTS	Lr
97.10	100	0.06		BTS	Lr
98.20	100	0.04		BTS	Lr
100.10	95	0.02		BTS	Lr
101.80	100	0.04		BTS	Lr
103.10	100	0.05		BTS	Lr
105.00	89	0.04		BTS	Lr
107.80	100	0.05		BTS	Lr
109.60	94	0.08		BTS	Lr
110.10	60	0.01		BTS	Ln
111.00	89	0.03		BTS	Ln
112.20	100	0.09		BTS	Ln
112.90	86	0.29		BTS	Ln
114.90	95	0.05		BTS	Ln
118.00	100	0.07		BTS	Ln
121.10	100	0.03		BTS	Ln
124.10	100	0.03		BTS	Ln
127.10	100	0.02		BTS	Ln
130.10	100	0.04		BTS	Ln
133.10	100	0.04		BTS	Ln
136.10	100	0.08		BTS	Ln
139.10	100	0.07		BTS	Ln
141.60	100	0.09		BTS	Ln
144.70	100	0.10		BTS	Ln
147.80	100	0.18		BTS	Ln
150.80	100	0.09		PR	Lr
153.90	100	0.16		PR	Lr
154.70	100	0.23		PR	Lr
156.20	107	0.14		PR	Lr

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PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
159.30	94	0.05		PR	cht
162.30	100	0.06		PR	Lr
163.10	100	0.07		PR	Ln
164.30	100	0.30		PR	Ln
166.10	92	0.05		PR	Lr
167.00	100	0.07		PR	Lr

Depth	Rec %	Mag	SG	Formn	Lith

Depth	Rec %	Mag	SG	Formn	Lith

328134

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. **BT1**

PROJECT:

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
0.00	3.60	BRECCIA buff, very coarse grained, poorly sorted matrix supported, lithic quartz phyric. distinct rock comprising abundant 5 to 50mm massive to lamminated siliceous grey shale clasts in matrix containing abundant 1mm glassy phyric quartz, and silica-sericite altered pumice.. CONTRACT: missing	highly oxidised. bleached and weathered andesites and volcaniclastics.		0			FAULT breccia
3.60	4.90	QUARTZ PHYRIC MASS FLOW buff, pumiceous quartz phyric. quartz phyric pumiceous volcaniclastic, similar to above interval without shale clasts.. CONTRACT: missing						
4.90	11.90	BRECCIA buff, pumiceous quartz phyric. similar to above intervals with variable shale clast content.. CONTRACT: faulted						FAULT breccia
					10			FAULT breccia
11.90	13.80	CHERT buff, brecciated. zone of cherty alteration? intensly brittle fractured with infill oxidised clays. Minor patchy massive pyrite partly oxidised.. CONTRACT: missing		MASSIVE abundant pyrite massive. irregular patches of massive pyrite and oxidised material. The pyrite occurs in two zones, the first appears to be a folded vein, the seconed appears to be as 2cm clasts.				
13.80	14.50	SANDSTONE buff, pumiceous quartz phyric feldspar phyric. quartz-feldspar phyric pumiceous, rhyodacite lava, or volcaniclastic?. CONTRACT: missing						
14.50	15.50	SILTSTONE buff. zone of faulting with pyritic shale, massive siltstone and cherty breccia.. CONTRACT: faulted						FAULT A50 pug
15.50	17.70	CHERT red, fine grained. zone of red siliceous alteration with fine fractures filled with pyrite.. CONTRACT: missing		STRINGER very minor sulphide in veinlets. Minor fine irregular pyrite veinlets, and trace coarse grained brown sphalerite filling open space.				FAULT A45 pug
17.70	45.10	ANDESITE buff red, massive. massive bleached and oxidised, weathered andesite. Minor relict plagiocase and hornblende present.. CONTRACT: faulted						FAULT A45 pug
					20			BROKEN CORE

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BT1

PROJECT:

Vertical Scale 1 : 150

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
17.70	45.10	ANDESITE buff red, massive. massive bleached and oxidised, weathered andesite. Minor relict plagiocase and hornblende present.. CONTACT: faulted	highly oxidised. bleached and weathered andesites and volcaniclastics.		30 40			BROKEN CORE

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. **BT1**

PROJECT:

Vertical Scale 1 : 150

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
17.70	45.10	ANDESITE buff red, massive. massive bleached and oxidised, weathered andesite. Minor relict plagiocase and hornblende present.. CONTACT: faulted	highly oxidised. bleached and weathered andesites and volcaniclastics.					
45.10	47.50	CHERT MIXED WITH ANDESITE green grey. zone of irregular mixed cherty siltstone and reworked andesite derived detritus.. CONTACT: conformable abrupt		STRINGER very minor sulphide in veinlets pyrite disseminated. Trace irregular veinlet brown sphalerite, and minor disseminated pyrite with trace sphalerite.				
47.50	56.80	ANDESITE buff, massive. zone of massive bleached rock possibly weathered bleached andesite.. CONTACT: missing		STRINGER very minor sulphide in veinlets pyrite disseminated. Trace irregular veinlets of grey pyritic sulphides.	50			
				STRINGER very minor sulphide in veinlets pyrite disseminated. Trace irregular veinlets of grey pyritic sulphides.				
56.80	63.10	BRECCIA buff. zone of irregular angular clasts predominantly quartz phyric dacite/rhyolite in sericite altered pumiceous? matrix.. CONTACT: conformable abrupt	moderately oxidised. bleached volcanics with feldspars weathered to clays, and oxidised on joint faces.		60			

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Hole No. BT1

PROJECT:

Vertical Scale 1 : 150

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
63.10	109.80	BRECCIA buff. zone of irregular angular clasts predominantly quartz phyric dacite/rhyolite in sericite altered pumiceous? matrix.. CONTACT: conformable abrupt	moderately oxidised. bleached volcanics with feldspars weathered to clays, and oxidised on joint faces.					PRIMARY FABRIC ABO
		RHYOLITE buff, massive, quartz phyric feldspar phyric. prominantly quartz phyric rhyolite to dacite lava to lava breccia. Trace flow banding in part.. CONTACT: missing		STRINGER very minor sulphide in veinlets pyrite disseminated. Trace irregular veinlets of grey pyritic sulphides.	70			
					80			

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Vertical Scale 1 : 150

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
63.10	109.80	RHYOLITE buff, massive, quartz phyric feldspar phyric. prominantly quartz phyric rhyolite to dacite lava to lava breccia. Trace flow banding in part.. CONTACT: missing	moderately oxidised. bleached volcanics with feldspars weathered to clays, and oxidised on joint faces.		90 100		FALLT A60 pug	

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
63.10	109.80	RHYOLITE buff, massive, quartz phyric feldspar phyric. prominantly quartz phyric rhyolite to dacite lava to lava breccia. Trace flow banding in part.. CONTACT: missing	moderately oxidised. bleached volcanics with feldspars weathered to clays. and oxidised on joint faces.					
109.80	129.60	ANDESITE grey green, peperitic. andesite peperite: andesite is massive to flowbanded, abundant leucoxene, green sericite altered feldspars and horneblends, mixed with (1 to 1) pale grey silicifies siltstones. Andesites generally large 10 - 50cm blocks, distinctive texture.. CONTACT: gradational	moderately silicified. moderately sericitised, slightly carbonatised. mixed silicified siltstone, with waxy green sericite patches, and massive cream manganese carbonate and/or sericite altered andesite.	VEIN minor sulphide in veins. Coarse grained pale rich brown sphalerite and galena in white quartz veins. VEIN minor sphalerite associated with alteration. irregular very fine grained, very pale coloured sphalerite spots, replacing feldspars in part, and apparently controled in part by cleavage. Abundance deceptive as it is indistinguishable from sericite. VEIN minor sphalerite associated with alteration. Coarse grained rich pale brown sphalerite, chalcopyrite, and fine grained dark grey sphalerite/galena concentrated in cherty shale part of andesite peperite. Dark grey sulphide replacement is nucleated along fine fracture in chert, and is in turn replaced by coarse brown sphalerite. DISSEMINATED minor sphalerite associated with alteration. Zone of minor dark grey fine grained sphalerite/galena, concentrated in cherty shale part of andesite peperite, partially replaced by coares grained pale sphalerite. Minor fine grained pale sphalerite replacing feldspars, and alligned in cleavage in andesite part of peperite. Abundance is deceptive as it is indistinguishable from sericite.	110 120		FAULT PRIMARY FABRIC A60 FIRST CLEAVAGE A40	

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
109.80	129.60	ANDESITE grey green, peperitic. andesite peperite: andesite is massive to flowbanded, abundant leucoxene, green sericite altered feldspars and horneblends, mixed with (1 to 1) pale grey silicifies siltstones. Andesites generally large 10 - 50cm blocks, distinctive texture.. CONTACT: gradational	moderately silicified, moderately sericitised, slightly carbonatised. mixed silicified siltstone, with waxy green sericite patches, and massive cream manganese carbonate and/or sericite altered andesite.	DISSEMINATED minor sphalerite associated with alteration. Zone of minor dark grey fine grained sphalerite/galena, concentrated in cherty shale part of andesite peperite, partially replaced by coares grained pale sphalerite. Minor fine grained pale sphalerite replacing feldspars, and alligned in cleavage in andesite part of peperite. Abundance is deceptive as it is indistinguishable from sericite.				
129.60	139.30	ANDESITE green, massive. massive andesits, fragmental in part with minor peperite component.. CONTACT: faulted	moderately silicified, slightly sericitised. silicified andesite and lesser sediments, with cream manganese colouration in andesites. Feldspars altered to waxy green sericite. Does silicification post date manganese carbonate/sericite alteration?	VEIN very minor sulphide in veinlets. Trace coarse grained chalcopyrite, pale sphalerite and galena in fine white quartz, and cherty veinlets.	130			
				VEIN very minor sphalerite associated with alteration. Minor fine grained dark grey sphalerite/galena associated with pink/cream manganoan carbonate infilling of brecciated andesite.			
139.30	140.20	SANDSTONE green, massive upwards fining sequence. reworked andesite derived detritus.. CONTACT: conformable abrupt						
140.20	141.20	BRECCIA MIXED WITH ANDESITE green. irregular zone of mixed andesite clasts and siltstone, reworked rather than peperitic.. CONTACT: conformable abrupt			140			FAULT A40
141.20	150.70	ANDESITE grey green. classic andesite autobreccia.. CONTACT: conformable abrupt	slightly carbonatised. minor clasts and infill of fine grained cream coloured manganoan carbonate.					FAULT A40
				VEIN very minor pyrite in veinlets. Very fine grained pyrite interstitial to carbonate altered fragmental andesite.				

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
141.20	150.70	ANDESITE grey green. classic andesite autobreccia.. CONTACT: conformable abrupt	slightly carbonatised. minor clasts and infill of fine grained cream coloured manganoan carbonate.					
150.70	152.80	RHYOLITE red, massive, quartz phyric feldspar phyric. prominantly quartz phyric (Pinnacles) rhyolite.. CONTACT: conformable abrupt	slightly silicified, slightly carbonatised. carbonate altered feldspars.		150			
152.80	153.40	SANDSTONE grey, massive. irregular band of fine grained reworked andesite?. CONTACT: conformable abrupt						
153.40	158.50	RHYOLITE red, massive, quartz phyric feldspar phyric. typical Pinnacles rhyolite.. CONTACT: conformable abrupt						
158.50	159.50	CHERT pale grey, massive. cherty siltstone with minor carbonate pseudo clast.. CONTACT: conformable abrupt						
159.50	162.50	RHYOLITE red, massive, quartz phyric feldspar phyric. typical Pinnacles Rhyolite.. CONTACT: conformable abrupt			160		VEIN A35	
162.50	164.90	ANDESITE pale green, massive. massive very fine grained mafic pale green, with minor fuchsite.. CONTACT: faulted	moderately chloritised, slightly fuchsitic. chlorite - fuchsite altered andesite.				FAULT breccia	
164.90	167.00	RHYOLITE grey, massive, quartz phyric feldspar phyric. quartz phyric rhyolite.	slightly silicified, slightly carbonatised. carbonate altered feldspars.				FAULT breccia	